

Change Table.1: This table identifies modifications to existing L4 Release B Requirements as identified in RTM Baseline version 011797.

L4 id	req_key	rel	req_type	req_status	ver_method	ver_status	CCR	clarification	text
C-ISS-02100	7406	B0	functional	approved	test	unverified	96-1355		The ISS-INHW CI shall use physical devices and Medium Access Control protocols compatible with the following standards: a. IEEE 802.2 (Logical Link Control) b. IEEE 802.3 (MAC for Ethernet) c. <u>ANSI X3.183, X3.210, X3.218, X3.222 (HiPPI)</u> IEEE 802.6 (MAC for SMDS) d. ANSI X3T9.5 (MAC for FDDI).
C-ISS-02250	7413	B0	functional	approved	test	unverified	96-1355		The ISS-INHW CI LAN Analysis Equipment shall <u>have the capability to analyze IP, Internet, and FDDI packet.</u> include Local Area Network analyzers.
C-ISS-11020	11873	B0	interface	approved	test	unverified	96-1471A	<u>ORNL interface via ESnet.</u>	The ISS shall interface with NSI at GSFC, LaRC, EDC, JPL, NSIDC, ORNL, and ASF to provide DAAC access to science users in accordance with the following current documents: document a. DID-220, "Communications Requirements for the ECS Project" 194-220-SE3-001 b. "Interface Requirements Document between EOSDIS Core System (ECS) and the NASA Science Internet (NSI), 194-219-SE1-001 505-41-17".
C-ISS-11090	11874	B0	functional	approved	test	unverified	96-1471A		The ISS shall provide for local or metro-area connectivity to V0 network nodes at the GSFC, <u>ORNL</u> , LaRC, JPL, ASF, and NSIDC DAAC sites in order to provide interoperability between ECS and V0.

L4 id	req_key	rel	req_type	req_statuses	ver_method	ver_status	CCR	clarification	text
C-ISS-01040	10908	IR1	functional	approved	test	unverified	96-1020	<u>ISS uses GFE LANs (V0 facilities) for IR1 and Internet for Release B.</u>	The ISS shall provide for connectivity between the LaRC DAAC and EBnet for the ingest of L0 CERES data.
C-ISS-01080	2347	IR1	functional	approved	<u>test</u>	<u>unverified</u>			The ISS shall reuse the V0 WAN <u>and LAN links</u> in order to provide connectivity between V0 network nodes and V1 network nodes and to provide interoperability between the systems.
C-ISS-02060	2348	IR1	functional	approved	<u>test</u>	<u>unverified</u>			The ISS shall provide network layer services in compliance with one or more of the following protocols as appropriate to the type of the physical network supported. a. IP over Ethernet as specified in RFCs 894, 895, 826 (ARP), 903 (RARP) b. IP over FDDI as specified in RFC 1188, 1390 (ARP, RARP) c. IP over HiPPI as specified in RFC 1374 (includes ARP, RARP) d. IP over SMDS as specified in RFC 1209 (includes ARP, RARP)
C-ISS-02520	9389	IR1	functional	approved	<u>test</u>	<u>unverified</u>		<u>Note: V0 network supports OSPF.</u>	The ISS shall provide services based on the Open Shortest Path First (OSPF) protocol referenced in RFC 1583 to route traffic between the source and destination nodes, maintain route databases, and exchange routing information between networks.
C-ISS-02530	9390	IR1	functional	approved	<u>test</u>	<u>unverified</u>		<u>ISS uses V0 facilities for IR1 and Internet for Release B.</u>	The ISS shall provide services based on the Routing Information Protocol (RIP) referenced in RFC 1058 to route network traffic between the source and destination nodes.

L4 id	req_key	rel	req_type	req_status	ver_method	ver_status	CCR	clarification	text
C-ISS-01090	10886	A	functional	approved	demo	unverified	96-1016		The ISS shall provide for local or metro area connectivity between V0 network nodes and V1 network nodes at GSFC and LaRC DAAC sites in order to provide interoperability between the systems.

Table.2: This table identifies adding the new ISS L4 requirement to existing L4 Release B Requirements as identified in RTM Baseline version 011797.

<u>L4 id</u>	<u>req_key</u>	<u>rel</u>	<u>req_type</u>	<u>req_status</u>	<u>ver_method</u>	<u>ver_status</u>	<u>CCR</u>	<u>clarification</u>	<u>text</u>
C-ISS-02522	NEW	B0	functional	approved	test	unverified			The ISS shall have the capability to provide services based on the Border Gateway Protocol-4 (BGP-4) referenced in RFC 1583 to route traffic between the source and destination nodes, maintain route databases, and exchange routing information between networks.

Table.3: This table identifies deletions of ISS L4 requirements to existing L4 Release B Requirements as identified in RTM Baseline version 011797.

<u>L4 id</u>	<u>req_key</u>	<u>rel</u>	<u>req_type</u>	<u>req_status</u>	<u>ver_method</u>	<u>ver_status</u>	<u>CCR</u>	<u>clarification</u>	<u>text</u>
C-ISS-02380	11872	B0	performance	approved	test	unverified	96-1471A		The ISS INHW CI LANs at the GSFC, and LaRC DAAC sites shall be capable of supporting twice the R-A network traffic load estimates without redesign.
C-ISS-21010	11877	B0	functional	approved	test	unverified	96-1471A		The ISS INHW CI shall provide LANs at the following sites: a. GSFC DAAC LAN b. GSFC EOC LAN c. EDC DAAC LAN d. LaRC DAAC LAN f. GSFC SMC LAN